

### Harambee School, Minnesota 2014-2015 School Nominee Presentation Form

#### **ELIGIBILITY CERTIFICATIONS**

### **School and District's Certifications**

Name of Superintendent: Dr. John Thein

The signatures of the school principal and district superintendent (or equivalents) on the next page certify that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct to the best of their knowledge. In no case is a private school required to make any certification with regard to the public school district in which it is located.

- 1. The school has some configuration that includes grades Pre-K-12.
- 2. The school has been evaluated and selected from among schools within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental education.
- Neither the nominated public school nor its public school district is refusing the U.S. Department of Education
  Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a
  district wide compliance review.
- 4. OCR has not issued a violation letter of findings to the public school district concluding that the nominated public school or the public school district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.
- 5. The U.S. Department of Justice does not have a pending suit alleging that the public school or the public school district as a whole has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
- 6. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the public school or public school district in question; or if there are such findings, the state or public school district has corrected, or agreed to correct, the findings.
- 7. The school meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

# U.S. Department of Education Green Ribbon Schools 2014-2015

☐ Charter X Title I X Magnet ☐ Private X Independent
Name of Principal: Mrs. Kathy Griebel
(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)
Official School Name: Harambee Community Cultures/Environmental Science School
(As it should appear on an award)
Official School Name Mailing Address: 30 East County Road B, Maplewood, MN 55117
(If address is P.O. Box, also include street address.)
County: Ramsey State School Code Number *: 0623-01-525
Telephone: 651.379.2500 Fax: 651.379.2590
Web site/URL: www.isd623.org/harambee E-mail: Kathy.griebel@isd623.org
*Private Schools: If the information requested is not applicable, write N/A in the space
I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.
Kathy A. Grief C
Date: 1/26/15
(Principal's Signature)



(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in official records)

District Name: Roseville Area Schools

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.

Date: January 28, 2015 (Superintendent's Signature)

### **Nominating Authority's Certifications**

The signature by the Nominating Authority on this page certifies that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct to the best of the Authority's knowledge.

- 1. The school has some configuration that includes grades Pre-K-12.
- 2. The school is one of those overseen by the Nominating Authority which is highest achieving in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
- 3. The school meets all applicable federal civil rights and federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Name of Nominating Agency: Minnesota Dept. of Education

Name of Nominating Authority: Dr. Brenda Cassellius

(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

I have reviewed the information in this application and certify to the best of my knowledge that the school meets the provisions above.

Bunda Canellin \_\_\_\_\_\_\_Date: January 30, 2015 (Nominating Authority's Signature)

#### (Nonlinating Authority's Signature)

### SUMMARY AND DOCUMENTATION OF NOMINEE'S ACHIEVEMENTS

Provide a coherent "snapshot" that describes how your school is representative of your jurisdiction's highest achieving green school efforts. Summarize your strengths and accomplishments in all three Pillars and nine Elements. Then, include documentation and concrete examples for work in every Pillar and Element.

### **SUBMISSION**

The nomination package, including the signed certifications and documentation of evaluation in the three Pillars should be converted to a PDF file and emailed to <a href="mailto:green.ribbon.schools@ed.gov">green.ribbon.schools@ed.gov</a> according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509 Expiration Date: February 28, 2015

### **Public Burden Statement**

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email ICDocketMgr@ed.gov and



reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.

### **Summary Narrative**

Working Together for a Common Purpose

Harambee Elementary is a unique school in many ways. Created as an inter-district voluntary integration project, we draw students from multiple geographic areas. As a magnet school, we use our dual foci of environmental science and community cultures as integrating themes. Our year round calendar and looping structure provide for more consistent learning. For over 18 years the school has been a place where students from diverse cultural, racial, and socio-economic backgrounds learn together. In 2013 we became officially part of the Roseville Area Schools (ISD 623), providing the benefits of unified governing system but keeping our multiple district student body and diverse population. Our name is a Swahili word that means "working together for a common purpose". Collaboration is an integral part of what we do. Teamwork within our school community and reaching out in cooperation with the larger community provides rich resources to share. Through collaboration we are able to reduce environmental impacts while increasing the health of our community and the quality of our environmental education.

Our magnet foci were carefully chosen and designed to work in unison as integrating themes. These foci are integrated into curriculum by classroom teachers but have also been designated as specialist focus classes. Students participate in these classes much like traditional school specialist classes of music, physical education and art. Our school was developed to provide a racially integrated environment with a focus on cross-cultural learning experiences. We believe that it isn't enough to have a diverse student body but that we must actively teach concepts and create opportunities that build understanding of self and others. This gives us a unique and valuable perspective from which to address environmental questions. Because of our dual foci, we use a project approach that connects people and the environment.

A great example is our work with a monarch butterfly theme. In 2013-14, a whole school migration study gave us insights into the life cycle and annual migration of this insect. We began with first hand study in our own backyard. We used our milkweed/prairie areas as observation and inquiry spaces. At each grade level we addressed specific science standards but also expanded into multiple subject areas. Students compared fiction and non-fiction books about butterflies and used resources like eBooks and interactive programs like Journey North to find out more. We wrote and read poetry about caterpillars and butterflies and studied human connections to butterflies across time and geography. Through a MN State Arts Board grant, we worked with guest artists to create butterfly sculptures and learn about the music and cultures of the people in the Mexican region where the butterflies go in winter. We had a school-wide butterfly parade to show off the beautiful works of art and installed a giant monarch mobile in our front entry way.

The project extended into the following year. Students participated in online citizen science projects and created ambassador butterflies to send to schools in the over wintering region. We connected with an internationally recognized resource in our own state; the University of MN Monarch lab. We invited lab staff to be part of our work at school and a small group of teachers participated in an extended workshop with the U and wrote grants to purchase related curricular materials. As we learned more about the complex environmental issues facing the monarch we decided to take action. Students began collecting milkweed seeds and researched the most successful ways to propagate plants. We wrote a grant for a specific butterfly garden that will make our grounds better for pollinators and have prepared over 1000 milkweed seeds to distribute both seeds and plants to the community this spring. In one grade level loop, an additional grant from the MN Ornithologists Union is providing support to expand our migration study to birds and in other grade levels we've moved into new kinds of insect study. Like a ripple on



water, the expanding circles from our project continue to move outward.

This project was the collaborative effort across groups within and outside of our school. Our initial authentic learning experience grew into actions that will impact our school and larger community.

This same cooperative ethic is the key to improving the other pillars of green ribbon excellence. Collaboration has resulted in our participation in food waste recycling, energy reduction efforts, and important work to make our school grounds more sustainable. Partnerships with our local watershed district, county conservation district and others make improvements possible. Teamwork has resulted in a healthier environment for both staff and students with initiatives like a peanut free environment, changes to school policies about sugary treats in classrooms and a culture of wellness in the building. We work together for a common purpose and do what it takes to make Harambee a place for life changing learning.

Green Ribbon Schools - School Application 2014-15

### School/District Information

School: Harambee Community Cultures/Environmental Science School

Street Address: **30 East County Road B** City/State/Zip: **Maplewood, MN 55117** 

Website: www.isd623.org/harambee-elementary

Principal Name: Kathy Griebel

Principal Email Address: kathy.griebel@isd623.org

Phone Number: **651.379.2501** 

Lead Applicant Name (if different): **Jenny Eckman** Lead Applicant Email: **jennifer.eckman@isd623.org** 

Phone Number: 651.379.2569

School District Name/number (if applicable): Roseville Area Schools, ISD623

Superintendent Name: Dr. John Thein

Superintendent Email Address: john.thein@isd623.org

School levels: (place an "x" after your choice)

Elementary (PK-5 or 6): X

School Type:

Public: X

How would you describe your school:

Urban: X

Suburban: X

Total Enrolled: 400

Does your school serve 40% or more students from disadvantaged households? Yes or No: Yes

Percentage receiving Free or Reduced Priced Lunch: 69%

Percentage limited English proficient: 24%

Attendance rate: 97%

## **Cross-Cutting Programs**

1. Is your school participating in a local, state or national school program, such as EPA



ENERGY STAR Portfolio Manager, EcoSchools, Project Learning Tree Green Schools, or others, which asks you to benchmark progress in some fashion in any or all of the Pillars? Yes or No: Yes

If yes, enter the program(s) and level(s) achieved:

Schools for Energy Efficiency 2011 (Energy Milestone), EPA Energy Star 2010 (Energy Star Leader), EPA Energy Star 2009 (Energy Star Leader), Schools for Energy Efficiency **2009** (Outstanding Achievement in Energy Reduction)

2. Has your school, staff or student body received any awards for facilities, health or environment?

Yes or No: Yes

If yes, enter the Award(s) and year(s) received:

Jenny Eckman, Environmental Science Specialist, was the recipient of a Raytheon Engineering is Elementary teacher scholarship (2014) and was named an H2O Hero by the Capitol Region Watershed District for her work teaching students about water quality issues. Harambee was a Green Ribbon Schools State Finalist (2012-2013). Schools for Energy Efficiency 2011 (Energy Milestone), Energy Star 2010 (Energy Star Leader), Energy Star 2009 (Energy Star Leader), Schools for Energy Efficiency 2009 (Outstanding Achievement in Energy Reduction), School Nature Area Project (SNAP) 2001 Pillar I: Reduced Environmental Impact and Costs

# Element 1A: Reduced or eliminated greenhouse gas (GHG) emissions

(preference for schools that have used State of Minnesota B3Benchmarking)

1. Can your school demonstrate a reduction in Greenhouse Gas emissions? Yes or No: Yes. We met our facility goals in 2011. We have continued to meet these goal in subsequent years. Percentage reduction: 16.5% Over (mm/yyyy - mm/yyyy): 10/1/2008-9/30/2011

Initial GHG emissions rate (MT eCO2/person): 237.61 Final GHG emissions rate (MT eCO2/person): 190.48

How did you calculate the reduction? Energy Star Program and Schools for Energy Efficiency participation

2. Do you track resource use in EPA ENERGY STAR Portfolio Manager? Yes or No: Yes If score is above a 75, have you applied for and received ENERGY STAR certification?

Yes or No: Yes Year: 2009 and 2010

3.	Has your school reduced its total non-transportation energy use from an initial baseline?
Yes or	· No: Yes
Curren	nt energy usage (kBTU/sq. ft. /year): 112.4
Percen	otage reduction: <b>31.3%</b> Over (mm/yyyy - mm/yyyy): <b>10/1/2008-9/30/2011</b>
How d	lid you document this reduction? Energy Star Program participation
4. Wha	at percentage of your school's energy is obtained from?
On-site	e renewable energy generation:Type:
We ar	e in discussion with Maplewood Community Solar I, LLC (MC Solar) to develop a
solar j	photovoltaic facility approximately 40kW in size. The project is expected to qualify as
a com	munity solar garden pursuant to Minn. Stat. Section 216B.1641 (2013) and sell all the
power	it produces to Northern States Power Company ("NSP"). MC Solar estimates that
the pr	oject will produce an average of 48,048 kWh annually, using approximately ninety-
six 41	0W modules.
Purcha	ased renewable energy:Type:
	pation in USDA Fuel for Schools, DOE Wind for Schools or other federal or state school

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energy program: We recently received grant funding from HB Fuller Foundation to start

solar and wind engineering projects on site. We are exploring a partnership with the district alternative high school science program with a focus on wind energy. Our three-year plan is to have an on-site wind turbine and official participation in the Wind for Schools program.

5. In what year was your school originally constructed? 1996

What is the total building area of your school? **78,000 square feet** 

6. Has your school constructed or renovated building(s) in the past ten years? Yes or No: No

## Element 1B: Improved water quality, efficiency, and conservation

7. Can you demonstrate a reduction in your school's total water consumption from an initial baseline?

Yes or No: Yes

Average Baseline water use (gallons per occupant): 150.33 gallons/month per occupant

Current water use (gallons per occupant): 26.7 gallons/month per occupant

Percentage reduction in domestic water use: 70.40%

Percentage reduction in irrigation water use: 92.53%

Time period measured (mm/yyyy - mm/yyyy): 9/30/12 – 9/30/14

Explain how you documented this reduction (e.g. ENERGY STAR Portfolio Manager, utility bills, school district reports):

# City of Little Canada utility bill – account history report for 30 East County Road B, Maplewood

8. What measures are you taking to reduce water consumption, such as controlling leaks and water-efficient devices?

We use motion sensors to control water usage on sinks. We no longer irrigate our grounds. We have received \$55,000 in funding from Capitol Region Watershed District to design and construct storm management projects (rain gardens) campus-wide.

9. What percentage of your landscaping is considered water-efficient and/or regionally appropriate? **Approximately 50%** 

Types of plants used and location: Native plants are used throughout the grounds. These plants grow well in the climate without additional watering needs. Natural prairie, woodland, and wetlands are part of the grounds. New rain gardens will feature native plants.

10. Describe alternate water sources used for irrigation. (50 words max)

We no longer irrigate our grounds. We have received \$55,000 in funding from Capitol Region Watershed District to design and construct storm management projects (rain gardens) campus-wide.

11. Describe any efforts to reduce storm water runoff and/or reduce impermeable surfaces. (50 words max)

We have received grant funding from Capitol Region Watershed District to create several rain gardens and bio-swales on the school property. We will convert approximately 10,000 square feet of property from lawn or parking lot to rain garden with a significant impact to storm water run-off.

12. Our school's drinking water comes from: (place an "x" after your choice) Municipal water source: **X** 

13. How does the school ensure drinking water is safe, such as lead testing, well testing, and steps to reduce lead (50 word max):

### Our school was constructed using lead-free fixtures and piping.

14. What percentage of the school grounds are devoted to ecologically beneficial uses such as natural areas, rain gardens, and run-off buffer? **Over 25%** 

With the addition of rain gardens, over 25% of the school grounds will be devoted to

ecologically beneficial uses. Native plants are used throughout the grounds. These plants grow well in this climate without additional watering needs. Natural prairie, woodland, and wetlands are part of the grounds.

### **Element 1C: Reduced waste production**

- 16. What percentage of solid waste is diverted from landfilling or incinerating due to reduction, recycling and/or organics diversion (food to people, food to hogs and/or composting)? Note that Minnesota Statutes, section 115A.151 requires that schools must recycle a minimum of three material types. Complete all the calculations below to receive points.
- A. Monthly garbage service in cubic yards (garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected): 6 yards x 2 x 52 = 624 yards/year 6 yards x 8 per month = 48 yards/month
- B. Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected): 6 yards x 52 weeks = 312 yards/year 6 yards x 4 = 24 yards/month
- C. Monthly organics diversion (food to people, food to hogs and/or composting) volume(s) in cubic yards (leftover food collection bin/food scrap and/or soiled paper dumpster size(s) x number of collections per month x percentage full when emptied or collected): 32 gallons x 8.5 (100% full) 272 gallons (3.4 cubic yards)/month
- D. Recycling and Diversion Rate =  $((B + C) \div (A + B + C) \times 100)$ : 27.4/75.4=36.3%

Monthly waste generated per person = (A/number of students and staff): .096 yards/month 17. What percentage of your school's total office/classroom paper content by cost is post-consumer material or fiber from forests certified as responsibly managed by the Forest Stewardship Council (If a product is only 30% recycled content, only 30% of the cost should be counted)? Less than 10%. We are required to use the district copy center for paper purchases. This is not a school-based decision. As part of a Student Council "Go Green" initiative, students are assessing how we are doing with our current paper recycling efforts. We are also encouraging reduction of paper consumption and improved recycling.

18. List the types and amounts of hazardous waste generated at your school. (Note that Minnesota Statutes, section 121A.33 bans mercury in Minnesota schools.)

Flammable Liquids: motor oil, gasoline - negligible

Corrosive liquids: **batteries - negligible** 

Toxics: **none** Mercury:**none** 

Other: light bulbs, ballasts, computers, electronics - standard

How is this measured?

Custodial staff manages all hazardous waste.

How is hazardous waste disposal tracked?

Our district has a hazardous waste policy for storage, management, and disposal that is actively enforced. Our custodial program has been certified by the ISSA Cleaning Industry Management Standard – Green Building.

19. Describe other measures taken to reduce solid waste and hazardous waste, use recycled materials, and properly dispose of hazardous materials. Include electronic devices. (100 word max)

Our school participates in paper recycling, composting, and food waste recycling programs. We use compostable trays in our cafeteria. All breakfast, lunch and snack food waste is sent to Barthold Hog Farms Food Recycling program. Several grade level teams use worm bins for curricular projects and the compost is used in the school gardens along with a spinning compost system that we use in our vegetable garden. All lost and found items are washed and donated to the community. An electronic recycling program is one of our Partners in Education (our version of PTA) fundraisers.

### **Element 1D: Alternative Transportation**

21. What percentage of your students walk, bike, bus, or carpool (2 or more students in the car) to/from school? (Note if your school does not use school buses.) **94%** How is this data calculated? (50 word max)

We are not a neighborhood school. 100% of students are bussed or transported by families. Of the 13% of families that transport, 7% are in carpools of two or more students in the car. We have no students that walk or bike to school as there are no safe routes and our students are coming from multiple districts.

22. Has your school implemented any of the following? (place an "x" after all that apply)
Designated carpool parking stalls:
A well-publicized no idling policy that applies to all vehicles (including school buses): <b>X</b>
Vehicle loading/unloading areas are at least 25 feet from building air intakes, doors, and
windows: X
Safe Pedestrian Routes to school or Safe Routes to School:
Describe activities in your safe routes program and other events to encourage students to walk,
bike or carpool, including number of participants. (50 word max)

Since there are no safe walking/biking routes to Harambee, we cannot encourage this option. We have participated in Walk To School Day by having a "Walk At School" event. We have a designated staff member who enforces the no idling and vehicle unloading policies during school start and end times.

23. Describe how your school transportation use is efficient and has reduced its environmental impact. (50 word max)

School bus drivers adhere to our "no idling" policy. The district's bus company invested in 4-cylinder Mercedes diesel engines in their new buses - a fleet of about 50 buses. These buses get about two mpg better fuel economy than the 6 and 8 cylinder diesels that power their other buses. This results in a savings (district-wide) of about 15,000 gallons per year of fuel used.

24. Describe any other efforts toward reducing environmental impact, focusing on innovative or unique practices and partnerships. (100 word max)

In addition to the rain garden grant, we are working with CRWD on possibilities for alternative water sources. We applied for a grant through the North American Monarch Institute to develop a specific butterfly garden area adjacent to a rain garden. We are working with Maplewood's Environmental Science and Natural Resource Commission to

explore options for partnerships. We are working with a local solar energy provider to contract for a community solar energy panel that would not only serve as a renewable energy source but be a learning tool for students. During summer months, we participate in Excel Energy's Peak Control Energy Demand program.

# Pillar 2: Improve the health and wellness of students and staff Element 2A: Integrated school environmental health program

1. Describe your school's Integrated Pest Management efforts, including IPM/green certifications earned, routine inspections, pest identification, monitoring, record-keeping, pesticide reduction notification of staff and parents etc. (100 word max)

### Harambee employs the following IPM practices:

- The problem or pest is identified before taking action.
- Vegetation is kept at least one foot away from structures.
- Cracks and crevices are either sealed or eliminated.
- Lockers and desks are emptied and thoroughly cleaned regularly.
- Food-contaminated dishes, utensils, surfaces are cleaned by the end of each day.
- Garbage cans and dumpsters are cleaned regularly.
- Litter is collected and disposed of properly at least once a week.
- Fertilizers are applied several times during the year, rather than one heavy application.
- When pesticides are necessary, we use spot treatments rather than area-wide applications.
- 2. Which of the following practices does your school employ to minimize exposure to hazardous contaminants? State yes, no or not apply and explain with specific examples of actions taken.

Our school has a comprehensive indoor air quality management program that is consistent with Minnesota Department of Health best practices which are based on EPA's IAQ Tools for Schools: Yes. We implement the following best practices for indoor air quality management:

- Regular evaluation of building systems.
- A plan for responding to and correcting IAQ issues.
- Proper maintenance of the school's HVAC system to promote ventilation.
- Regular cleaning and replacement of filters.
- Regular checks on air intakes and air returns.
- Immediate repair of air handling units.
- Immediate response to moisture issues.
- Thorough and regular cleaning of entire facility.

Our school prohibits smoking on campus and in public school buses: Yes

Our school is in compliance with Minnesota Statutes, section 121A.33 and has identified and properly removed sources of elemental mercury and prohibits its purchase and use in the school. (This does not apply for fluorescent bulbs, mercury thermostats, switches and gauges for HVAC



systems.): Yes

Our school uses fuel burning equipment (such as boilers, water heaters and ovens) and has taken steps to protect occupants from carbon monoxide (CO): Yes. We have installed carbon monoxide detectors near combustion sources (e.g., boilers, stoves, hot water heaters).

Our school has sampled frequently occupied rooms in the last five years at or below ground level for radon gas and has fixed and retested all rooms with levels that tested at or above 4 pCi/L: Yes

Our school has identified and properly manages or has removed, where applicable, asbestoscontaining materials, according to U.S. EPA AHERA regulations and, where applicable, the Minnesota Department of Health asbestos abatement rules: **Does not apply. Building built in 1995.** 

Our school has identified and properly removed sources of lead according to the U.S. EPA's Renovation, Remodeling and Painting Rule where lead containing paint may be disturbed in areas used by children under the age of six: **Does not apply. Building built in 1995.** 

Our school has identified any wood playground or other structures that contain chromate copper arsenate and has taken steps to eliminate exposure: **Does not apply. We have no wood playground or other structures that contain chromate copper arsenate.** 

Our school has working local exhaust systems for major airborne contaminant sources: Yes. We have functioning exhaust systems for the following locations: kitchen, storage, bathrooms, boiler, and electrical rooms.

3. Describe how your school controls and manages chemicals routinely used in the school (including science, shop and maintenance) to minimize student and staff exposure. (100 word max)

All chemicals used for maintenance have proper labeling and are kept out of reach of students and staff in locked custodial closets. We do not use chemicals for science classes. We do not have shop classes.

4. Which green cleaning custodial service standard is used (i.e., Green Seal Standard for Commercial and Institutional Cleaning Services (GS-42), the ISSA Cleaning Industry Management Standard – Green Building)? **Green Seal Standard for Commercial and Industrial Cleaning Services (GS-42)** 

What percentage of all products is third-party certified? 80%

5. Describe actions your school has taken to have your school bus fleet retrofitted with cleaner burning engines or to acquire cleaner burning buses or fuel. (100 word max)

The district's bus company invested in 4-cylinder Mercedes diesel engines in their new buses - a fleet of about 50 buses. These buses get about two mpg better fuel economy than the 6 and 8 cylinder diesels that power their other buses. This results in a savings (district-wide) of about 15,000 gallons per year of fuel used.

6. Describe actions your school takes to control moisture from leaks, condensation, and excess humidity and promptly clean up mold or remove moldy materials when it is found. (100 word max)

We undertake yearly inspections of roof and building envelope to control leaks. We have a building-wide dehumidification system for moisture control. We have energy recovery ventilation systems to bring in fresh air while recovering the heating or cooling from dehumidified air.

7. Describe actions your school takes to ensure that all classrooms and other spaces are adequately ventilated with outside air, consistent with state or local codes, or national ventilation standards (Minnesota State Mechanical Code/American Society of Heating, Refrigerating and Air-conditioning Engineers (ASHRAE) guideline or 15 cubic feet per minute (cfm) of fresh air per occupant). Describe your school's practices for inspecting and maintaining the building's ventilation system and all unit ventilators to ensure they are clean and operating properly. (100 word max)

Our school meets the ASHRAE guidelines of fresh air per occupant. We have energy recovery ventilation systems to bring in fresh air while recovering the heating or cooling from the air-conditioned air. We are in compliance with MS 121A.33 to eliminate the purchase, storing, or use of elemental mercury. We have a chemical management program. We prohibit smoking on campus and in public school buses. We conduct regular inspections consistent with state and local codes.

8. Describe steps your school takes to protect indoor environmental quality, such as access to daylight, lighting quality, views to nature, acoustics, thermal comfort, etc. (200 word max)

Our school building was designed to maximize access to daylight. There are skylights throughout the building which promotes natural light over artificial lighting. Views to the outdoors are unhindered. Students frequently see wild turkeys, birds, and other wildlife from their classrooms. As a year-round school, students can view and experience nature in all four seasons. Instructional areas are carpeted which dampens sound and enhances acoustics. We have established indoor temperature standards for both heating and cooling. The building has an automated system to control for heating, cooling and lighting. During summer months, we participate in Excel Energy's Peak Control Energy Demand program.

9. Describe any other actions your school takes to manage indoor environmental hazards such as ice arena contaminants, PCBs, kitchen equipment, and air quality in swimming pools. Including doing periodic, comprehensive inspections of the school facility to identify environmental health and safety issues and take corrective action. (200 word max)

District supervisor of health and safety conducts regular inspections of kitchen equipment. We do not have an ice arena or swimming pool. District supervisor of health and safety and building lead custodian conduct comprehensive and periodic inspections of school facility to identify health and safety issues. Lead custodian reports health and safety issues to building safety team. Building safety team meets quarterly to review health and safety concerns, develop corrective actions, and recommend management procedures.

### **Element 2B: Nutrition and Fitness**

10. Which practices does your school employ to promote nutrition, physical activity and overall school health? State yes, no or not apply and explain with specific examples of actions taken. (50 word max each)

Our school participates in a Farm to School program to use local, fresh food: Yes. We are very invested in Farm to School. We have been buying blueberries and apples from local farmers. IFD also purchases locally.



Our school has a fruit, vegetable and greens salad bar: Yes. We offer a variety of fruits, vegetables and greens daily. We participate in MDE's Fresh Fruit and Vegetable Program which provides a daily fruit or vegetable snack to all students.

Our school has an on-site food garden: Harambee participates in the Garden in a Box grant program. This program provides soil and plants for our food garden as well as a garden class for the community. A trainer from the MN State Horticulture Society works with Harambee staff and families to encourage and increase participation in home food gardening.

Our school garden supplies food for our students in the cafeteria, a cooking or garden class or to the community: Yes. We have 12 raised-bed gardens that are maintained by students. Students plant and harvest a variety of produce and herbs. These gardens supply food for classroom and family food projects. With SHIP funding from the Minnesota Department of Health we are purchasing fencing and food preparation/storage materials to support a garden take-home project.

Food purchased by our school is certified as "environmentally preferable" (USDA certified organic, Fair Trade, Food Alliance or Rainforest Alliance): **No. Food is purchased by district. This is not a school-based decision.** 

Our students spent at least 120 minutes per week over the past year in school supervised physical education: No. However students spend a great deal of time outside and in supervised recreation. In addition to regular PE classes and outdoor recreation activities like snow-shoeing, a district outdoor active recess coordinator works with students to provide supervised activities at recess. We recently utilized a district wellness grant to purchase active fitness supplies for each grade level that can be used during indoor recess times as well.

At least 50% of our students' annual physical education takes place outdoors: Yes. Students go outside as part of PE class but also on a regular basis for environmental science class and as part of their classroom environmental science work.

Health measures are integrated into assessments: Yes. Our PE teacher uses the Fitnessgram fitness testing program to assess students twice a year. This program measures strength, endurance, and flexibility. Students track healthy activities that will help them improve overall health and fitness as well as the specific fitness gram measures. Vision and hearing screening are conducted regularly.

At least 50% of our students have participated in the EPA's Sunwise program (or equivalent UV protection and skin health education program): **No** 

11. Describe the type of outdoor learning activities, exercise and recreation available, including features such as trails, natural playgrounds, gardens, habitat projects and outdoor classrooms and describe the frequency of use. (100 word max)

Harambee is located on 28 acres of land. A trail system that circles the property is maintained year-round and includes several habitats plus two outdoor classroom spaces and the school gardens. In addition to these natural recreation and learning areas, there is a structured playground, baseball diamond, basketball court, open field and paved



area for four-square. Students used these outside spaces daily for active recess but also for physical education and environmental science classes and part of their classroom learning experiences. We utilize the grounds as an important learning and recreation space.

12. Describe any other efforts to improve nutrition and fitness, highlighting innovative or unique practices and partnerships. (100 word max)

Our PE teacher and environmental science specialist work together to get students active outside and to develop life-long healthy habits. They host a yearly winter celebration that brings together the school community for outdoor recreation and environmental education. We utilize our own gear of cross country skis and snow-shoes as well as partner with a local sporting goods store to provide adult size equipment. In the summer, a similar event brings families to school for a "trek the trails" activity combining physical fitness with environmental education. Family garden events are held twice a year and designed to address health and wellness.

This year Harambee became a site for the Girls on the Run program. This unique program combines training for a 5K (3.1 miles) running event with lessons that inspire girls to become independent thinkers, enhance their problem solving skills and make healthy decisions. The program targets girls in  $3^{\rm rd}$ - $8^{\rm th}$  grade and is possible through Harambee staff and community volunteers. The 10 week course meets twice a week and runs during spring and fall.

An active recess leader coordinates organized games during recess on a monthly basis and works with the recess monitors to develop multiple options for students during their recess time. One of the online health resources we use has features for both individual students and classrooms to track physical activity and work toward physical fitness and activity goals.

### Coordinated School Health, Mental Health, School Climate, and Safety

13. Does your school use a Coordinated School Health approach or other health-related initiatives to address overall school health issues? **Yes** 

If yes, describe the health-related initiatives or approaches used by the school:

We have a district and site committee that monitors staff wellness programs. A team of psychologists, social workers, counselors, and nurses provide student support services throughout the district. These professionals address the academic, social-emotional, health, and mental health needs of our students. Their goal is to improve students' capacities to learn and thrive through the support of schools, families, and communities working together.

- Work to create schools that are caring communities of connection, where all students can learn and thrive.
- Provide resources, services, and support for students, families, and staff related to health, mental health, social-emotional, attendance, and academic issues.
- Consult with building staff to help ensure quality education for students.
- 14. Does your school partner with any postsecondary institutions, businesses, nonprofit organizations, or community groups to support student health and/or safety? **Yes**

We are partnering with Community Dental Care to provide oral health education and free

dental sealants for all students in grades 1-3. We work with the Statewide Health Improvement Plan (SHIP) project to improve the quality of health for both staff and student health. We have an on-going grant initiative through SHIP that offers resources for mental and physical wellness. Century College nursing and medical assistant students volunteer to help with vision and hearing screening.

- 15. Does your school have a school nurse and/or a school-based health center? Yes. We have a licensed school nurse (LSN) on staff 1.5 days/week. We also have a full-time health assistant. When the LSN is not in the building, on-call nurses are available.
- 16. Describe your school's efforts to support student mental health and school climate (e.g. anti-bullying programs, peer counseling, etc.):

Students are supported by an interdisciplinary mental health team. This team works with students in areas related to mental health and school engagement. The team works with staff on attendance, emotional dysregulation in the school, student aggression or passivity that impedes learning. We brought in Steppingstone Theater for a school wide anti-bullying program and have been an official Pacer Unity Day site (anti-bullying) for the past four years. As part of the Pacer project, there is a school wide anti-bullying day once a month. Teachers have access to 2 different online resources for both physical and mental health education and activities for working with students. After analyzing results from student surveys and input from recess staff, we developed a recess resource called the Buddy Bench. The goal of the project is to provide a safe place for students who are experiencing exclusion or seeking a friend. An initial group of students modeled the program in a student made video that was shown to the whole school. Recess staff report the bench is being used and has been successful in reducing problems at recess related to exclusion and bullying.

### Pillar 3: Effective Environmental and Sustainability Education

1. Which practices does your school employ to help ensure effective environmental and sustainability education? State yes, no or not apply and explain with specific examples of actions taken, highlighting innovative or unique practices and partnerships.

Our school has an environmental or sustainability literacy requirement beyond state academic standards and graduation requirements. (100 word max): **Yes.** 

Harambee was designed with a deliberate focus on environmental education. In addition to our intentionally created environmental science specialist class, the ES teacher works with all grade levels to help teachers plan projects with environmental themes and connect environmental literacy to state standards. We focus on relationships between people and the natural world. Our expectation is that students leave Harambee with not only the knowledge of ecological systems and cycles but an understanding of how the natural and human world are connected. Students with these skills are not only environmentally literate, but in a position to impact change.

Environmental and sustainability concepts are integrated throughout the curriculum. (100 word max): Yes.

We believe the environment is an integrating context for multiple subject areas. Each grade level loop has environmental themes that unify work across the curriculum. For example a tree study in grades K and 1 involves weekly journal writing, art, math and inquiry projects. In the grade 2-3 loop, daily temperature graphing builds math skills while comparing our temps to those of other parts of the world connects to social studies themes. Through our partnership with the Jeffers Foundation, all classrooms use morning meeting



activities with environmental themes and use science notebooks on a regular basis.

Environmental and sustainability concepts are integrated into assessments. (100 word max): Yes. Because environmental science is one of our magnet foci, environmental science concepts are embedded into many of our informal assessments. The science notebooks are a quick way for teachers to see comprehension of concepts and what kind of questions students are formulating. We are also developing other methods to measure students' understanding including vocabulary based assessments, student self-assessments and pre and post evaluations for engineering projects. For example following a two year theme addressing water quality and conservation issues, 5th graders designed a water filtration system and rated themselves on both effectiveness and sustainability of the system.

Professional development in environmental and sustainability education is provided to all teachers. (100 word max): **Yes.** 

Our environmental science specialist provides on-going professional development for staff and serves as a resource for teachers around the integration of environmental concepts. This is built into our building staff development calendar. In addition to leading trainings and working with teachers directly, the ES specialist connects Harambee to community resources for professional learning. In the past year alone our teachers have worked to improve their environmental studies teaching through partnerships with the Jeffers Foundation, MN Ornithologist Union, Hamline Center for Global Environmental Education, Science Museum of MN, University of MN Monarch Lab and the Engineering is Elementary Curriculum program.

2. How does your school use sustainability and the environment as a context for learning science, technology, engineering and mathematics thinking skills and content knowledge? (100 word max)

We use the environment as an integrating theme that connects students to authentic learning experiences. Because our other magnet focus area is community cultures, we see critical importance in students being able to see multiple perspectives and to understand how the interaction between people and the natural world. Again, an example from the 4-5th grade loop shows this in action. Students not only learn the concept of the water cycle but examine how human interaction with water creates both problems and positives. We use the Mississippi River as a vehicle to explore water from scientific, cultural, and historical perspectives. Students participate in both a fall Mississippi river field trip on a historic paddle boat and a spring river field trip in canoes.

3. How does your school use sustainability and the environment as a context for learning green technologies and career pathways? (100 word max)

We use engineering as a vehicle to introduce both green technologies and career pathways. Each grade level has an engineering challenge that is connected to an environmental issue. A purposeful component of each challenge involves exploration into a particular field of engineering. For example in 2nd grade, after completing a unit on new plants as part of the science curriculum, students complete an engineering challenge where they learn about the field of bio-engineering and design and test their own hand pollinators. Observations in our own garden and a field trip to the MN Landscape Arboretum augment the experience.

4. Describe students' civic/community engagement projects integrating environment and sustainability topics. (100 word max)

We consistently seek to connect environmental science and community cultures. At each grade level, we examine ways that we can impact our school and the larger community in

positive ways. We strive to include an element of community service or action items with each project or theme. For example, as a result of the water theme, 5th grade students designed an "awareness raiser" t-shirt. Each shirt front asks, "Do you love your river?" and on the back lists ways that regular citizens can have an impact on protecting water quality. Students proudly sold the shirts at a family event.

5. Describe any other ways that your school integrates core environment, sustainability, STEM, green technology and civics into curricula to provide effective environmental and sustainability education, highlighting innovative or unique practices and partnerships. This can also include before and after school, during the summer and other enrichment opportunities. Examples include childcare programs, community education courses, parent education courses, and student green teams, environmental or outdoor clubs. (Maximum 200 words)

Our year round calendar gives us unique opportunities. During our school breaks we run an intersession program. These 8 day sessions are designed to provide students with both remediation and enrichment classes. The unique structure of the program means we are able to offer some extended experiences that integrate our environmental themes along with STEM and green technologies. One example is a class where students investigate local food sources and compare the carbon footprint of non-local foods. Then using foods from our on-site food garden, they prepare a snack to share with other classes and spread the word about making more sustainable choices. During the 2014-15 school year, we became a district site for a before-school program focusing on improving achievement for students in 4-6th grade. The project, called Unity Center targets students who are at risk for school failure. The coordinator of Unity Center works closely with the environmental science specialist to include opportunities for students that fit with our environmental themes. We have also begun new ways of expanding to the larger community; including offering an environmental science community education class, hosting a rain barrel workshop, and offering environmental and outdoor education resources to other schools in the district.

6. Describe your partnerships (e.g. business, community, informal education, colleges) to help your school and other schools achieve in the 3 Pillars. Include both the scope and impact of these partnerships. (Maximum 200 words)

We have extended tremendous effort into developing partnerships that will help us improve the quality of our environmental education and impact the larger community. We have partnered with the Jeffers Foundation to provide resources like curricular materials, science journals and workshops for teachers and families. This year we extended that partnership to involve two additional schools in the district. Through Jeffers and an additional grant from the HB Fuller Foundation, we will be assisting these schools with using science journals and working together on a solar/wind energy engineering project. Our own solar engineering project will be improved through partnership with a solar energy company. We have an on-going partnership with the Capitol Region Watershed District that provides funding for a number of initiatives including teacher training and transportation for environmental field trips as well as community initiatives like a rain barrel workshop. Recently we expanded our work with CRWD to include a large grant for grounds features that will significantly decrease storm water run-off on our property and serve as a community example of water protection. We continue to host pre-student teachers through the University of Wisconsin and co-host classes through the MN DNR and MN State Horticulture Society.



# Our School Grounds are Rich with Places for Year-Round Learning

Volunteer from St.Paul Audubon Society showing us how to use our new binoculars.

Harvesting sweet potatoes from the Harambee vegetable garden.

Teachers are learners too; Jeffers Calendar Curriculum training.







Community rain barrel workshop with CRWD—22 rain barrels constructed!

Students working with iPads outdoors.

# GreenRibbonSchools



# Our School Grounds are Rich with Places for Year-Round Learning

Art meets science in the flower garden.



Parents get to know each other while working in the garden for one of our regular garden events.

Friendly reminder of one of our student council Go Green initiatives.



Testing water filter design.



5<sup>th</sup> graders enjoy the science of sledding

